Technical Service Bulletin

01 MIL on (DTC P2293, P0087)

01 13 18 2013147/12 August 1, 2013. Supersedes Technical Service Bulletin Group 15 number 11-22 dated May 31, 2011 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2005-2006	All	2.0TFSI engine, engine code BPG
A3	2006-2007	All	2.0TFSI engine, engine code BPY
A4	2007	All	2.0TFSI engine, engine code BWT
Cabriolet	2007	All	2.0TFSI engine, engine code BWT

Condition

REVISION HISTORY		
Revision	**Date**	**Purpose**
12	-	Revised header data (Updated customer codes, added DTCs)
11	5/31/2011	Revised *Warranty*
10	4/6/2011	Revised *Warranty* Revised *Required Parts and Tools*
9	7/14/2010	Revised header data (Controlling TSB display in ElsaWeb)
8	11/20/2008	Revised Title to include Repair Group

- MIL on.
- **DTC P2293** (Fuel pressure regulator 2 performance) is stored in the engine control module (ECM).
- The following DTCs may be stored in combination with DTC P2293:
  - **DTC P0087** (Rail fuel pressure too low)
  - **DTC P1093** (Fuel trim 2, bank 1 malfunction)

Technical Background

Excessive wear of the cam lobe (in the intake camshaft) that drives the high pressure fuel pump limits the maximum pump piston lift, causing fuel rail pressure fluctuations. The wear on the cam lobe also leads to wear in the base of the high pressure fuel pump cam follower.

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Production Solution

Increased surface hardening of the camshaft lobe for the high pressure fuel pump.

Improved intake camshafts have part number **06F109101B**.

Service

1. Remove the high pressure fuel pump and visually inspect:
   - The base surface of the cam follower (Figure 1, 6) in contact with the camshaft lobe.
   - The tip of the high pressure fuel pump plunger.
   - The high pressure fuel pump camshaft lobe.

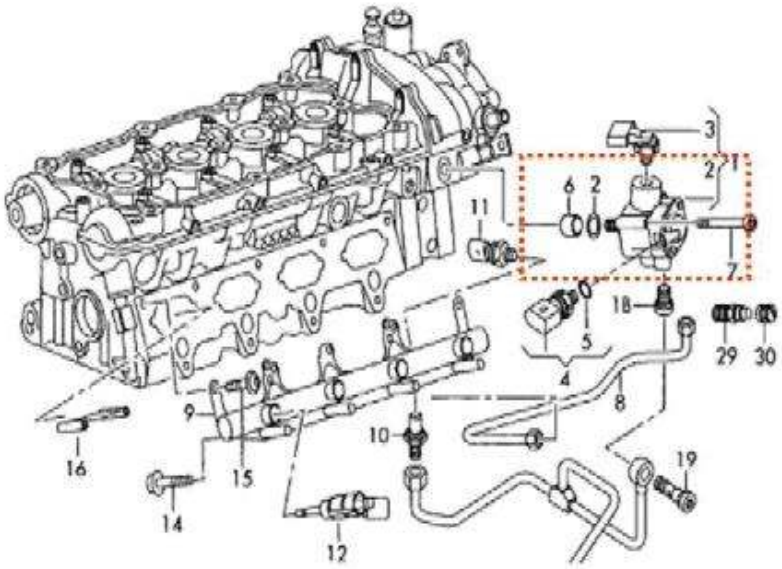


Figure 1. *The high pressure fuel pump.*

2. If the base of the cam follower shows normal wear (Figure 2, C) or is a new part (Figure 2, D), the cam follower and cam shaft should not be replaced because excessive wear is not present.



Figure 2. *Cam followers in various stages of wear: holed base (A), excessive wear (B), normal wear (C), and new part (D).*

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3. If the cam follower base surface is excessively worn so that its surface is concave (Figure 2, B) or missing (Figure 2, A), or if the high pressure fuel pump camshaft lobe shows excessive wear (Figure 3), replace the intake camshaft and the cam follower.



Figure 3. *Excessive wear on the lobe for high pressure fuel pump in the intake camshaft.*

4. The high pressure fuel pump must be replaced only if the tip of the plunger shows excessive wear (Figure 4). This condition is only possible if the cam follower base is holed and the plunger tip has come in direct contact with the camshaft lobe.



Figure 4. *Excessive wear marks on the tip of the high pressure fuel pump plunger.*

5. If the intake camshaft is replaced because of excessive wear, also replace the engine oil and the oil filter.

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Warranty

When procedure applies to vehicles under warranty, use the following:

Note:

Only one of the following scenarios will apply; see table below:

1. DTCs P2293, P0087 *not* present within 10/120 extension (outside of NVLW)
2. DTCs P2293, P0087 present, repair as technical bulletin

Scenario 1:

Claim Type:	110		
Service Number:	1505 – within NVLW S651 – within 10/120 extension (outside of NVLW)		
Damage Code:	0018		
Labor Operations:	GFF (Retrieve and clear codes) - DTCs P2293, P0087 *not* present within 10/120 extension (outside of NVLW)	0150 0000	20 TU
Claim Comment:	As per TSB #2013147/12		

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Scenario 2:

Claim Type:	110			
Service Number:	1505 – within NVLW S651 – within 10/120 extension (outside of NVLW)			
Damage Code:	0018			
Labor Operations:	**A3**	Camshaft remove & install	1505 2017	520 TU
		Perform Oil Change	1730 1999	20 TU
		High Pressure Pump (if necessary)	2463 9999	50 TU
	A4	Camshaft remove & install	1505 1967	420 TU
		Lock Carrier remove & install Auto Trans Manual Trans	 5038 0900 5038 0902	 160 TU 130 TU
		Perform Oil Change	1730 1999	20 TU
		High Pressure Pump (if necessary)	2463 9999	50 TU
	GFF (Retrieve and clear codes)		0150 0000	20 TU
	Road test prior to service procedure		0121 0002	10 TU
	Road test after service procedure		0121 0004	10 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)			
Claim Comment:	As per TSB #2013147/12			

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Required Parts and Tools

Please refer to ETKA for required parts and tools for each model.

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Additional Information

All parts and service references provided in this TSB (2013147) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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